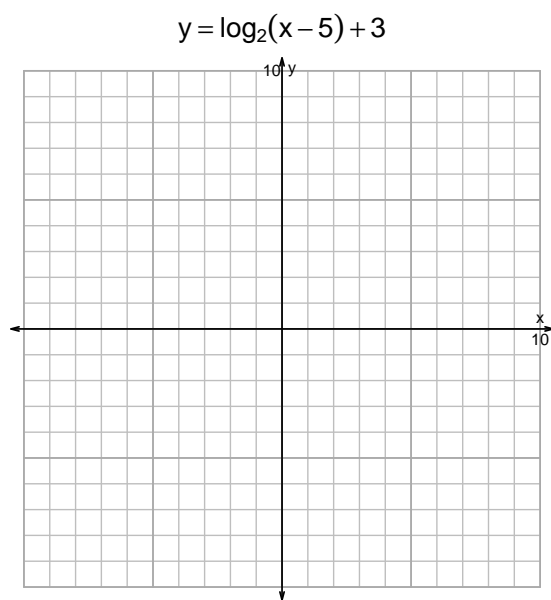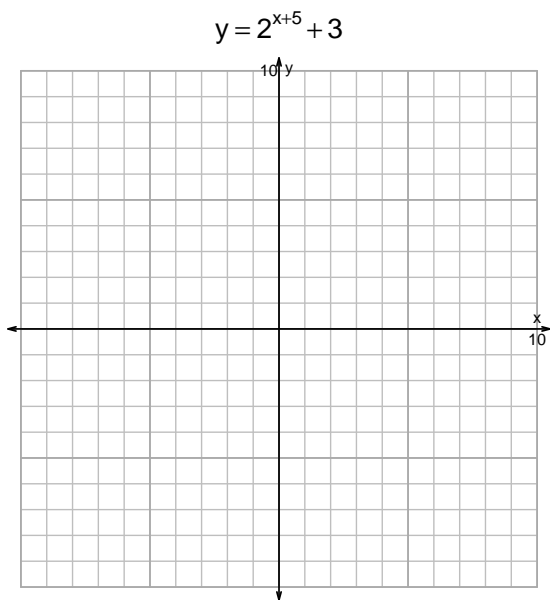Name: _____   Date: _____

s18quiz: EXP LOG (Practice v130)

1. Graph $y = 2^{x+5} + 3$ and $y = \log_2(x-5) + 3$ on the grids below. Also, draw any asymptotes with dotted lines.

<div style="display:flex;">

$$y = 2^{x+5} + 3$$

$$y = \log_2(x-5) + 3$$

</div>

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-23 = \left(\frac{-4}{5}\right) \cdot 2^{-3t/7}$$

3. An exponential function $f(x) = 0.213 \cdot e^{-2.11x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(1.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.4)$.